

REMARKS

Claims 1, 6, and 7 have been amended. Accordingly, claims 1, 3-7, and 9-11 are currently pending in the application, of which claims 1, 6, and 7 are independent. No new matter has been added.

Rejections Under 35 U.S.C. § 102

Claims 6, 7, and 9-11 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by U.S. Patent No. 6,184,541 issued to Oka, *et al.* ("Oka"). Applicants respectfully traverse this rejection for at least the following reasons.

In order to even more particularly point out the aspects of the present invention, claim 6 has been amended, so as to recite lightly doped drain (LDD) or offset regions, each comprising inner and outer sides, formed at respective opposite sides of the channel region and between the source and drain regions, the inner sides of the offset regions directly contacting the channel region, and the outer sides of the offset regions directly contacting the source and drain regions.

At page 2 of the Final Office Action dated December 2, 2010, states that Oka teaches lightly doped drain (LDD) or offset regions (portions of regions 4 having a width d in Fig. 1(b)) formed at respective opposite sides (left and right sides) of the channel region (8) and between the source and drain regions (5). In addition, in the Advisory action, the Examiner asserts that the locations of the LDD or offset regions was not specified in the claims.

Applicants respectfully submit that the teachings of Oka differ from the feature recited in amended claim 6 for at least the following reason.

First, the Office Action states that portions of regions 4 having a width d illustrated in Fig. 1(b) are formed at respective opposite sides of the channel region and between the source and drain regions (5). Applicants respectfully direct the Examiner's attention to Figs. 1(a) and 1(b)

and column 1, lines 26-32, and column 3, lines 37-43, which clearly state that the source 6 and the drain 7, each have an LDD structure that has a low concentration region 4 and a high concentration region 5. Thus, it is clear from the teachings of Oka, that the source region 6 includes two regions, a high concentration region 5 and a low concentration region 4, and that the drain region 7 also includes two regions, a high concentration region 5 and a low concentration region 4. That is, the high concentration region 5 is not by itself a source and drain region as suggested by the Examiner. Hence one of ordinary skill in the art would not arbitrarily interpret the high concentration region 5 as a source or drain region, as doing so would clearly be contrary to the teachings of Oka.

Furthermore, the LDD region (portions of region 4 having a width d in Fig. 1b) is part of the source region 6 or drain region 7, and therefore cannot be between the source and drain regions. Thus, nowhere in Oka is it taught or suggested “lightly doped drain (LDD) or offset regions formed at respective opposite sides of the channel region and between the source and drain regions, the inner sides of the offset regions directly contacting the channel region, and the outer sides of the offset regions directly contacting the source and drain regions” since the LDD region is part of the source and drain regions. Accordingly, Applicants respectfully request the Examiner to clearly evidence such teaching in Oka or withdraw the rejection under 35 U.S.C. §102.

In order to even more particularly point out the aspects of the present invention, claim 7 has been amended, so as to recite offset regions, each comprising inner and outer sides, formed at opposite sides of the channel region, the inner sides of the offset regions directly contacting the channel region; and source and drain regions respectively formed at outer sides of the offset regions and directly contacting the outer sides of the offset regions.

At page 3 of the Final Office Action dated December 2, 2010, states that Oka teaches

offset regions (portions of regions 4 having a width d in Fig. 1(b)) formed at opposite sides (left and right sides) of the channel region (8). The Office Action further states that Oka teaches that the source and drain regions (5) are respectively formed at outer sides of the offset regions. In addition, in the Advisory action, the Examiner asserts that the locations of the LDD or offset regions was not specified in the claims. .

Applicants respectfully submit that the teachings of Oka differ from the feature recited in amended claim 7 for at least the following reason.

As noted above, Figs. 1(a) and 1(b) and column 1, lines 26-32, and column 3, lines 37-43 of Oka, clearly state that each of the source region 6 and the drain region 7 have an LDD structure (offset region) that has a low concentration region 4 and a high concentration region 5. Thus, it is clear from the teachings of Oka, that the high concentration region 5 is not a drain or source by itself but is simply part of the source and drain regions. Hence one of ordinary skill in the art would not arbitrarily interpret the high concentration region 5 as a source or drain region, as doing so would clearly be contrary to the teachings of Oka.

Furthermore, the LDD structure (offset region, portion of region 4 having a width d) is also part of the source region 6 and drain region 7. Therefore, since the offset region and the high concentration region are part of the source and drain regions, it is not possible for the source and drain regions (5) to be formed at outer sides of the offset regions. Accordingly, Applicants respectfully request the Examiner to clearly evidence such teaching in Oka or withdraw the rejection under 35 U.S.C. §102.

Regarding the rejection of claims 9-11, it is noted that these claims depend from independent claim 7, and as noted above, Oka fails to teach or suggest the novel features of independent claim 7.

Accordingly, Applicants respectfully assert that the rejection of dependent claims 9-11 under 35 U.S.C. §102(b) should be withdrawn, at least, because of their dependency from claim 7, and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 9-11 also distinguish over the prior art.

Rejections Under 35 U.S.C. § 103

Claims 1 and 3-5 stand rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Oka. Applicants respectfully traverse this rejection for at least the following reasons.

In order to even more particularly point out the aspects of the present invention, claim 1 has been amended, so as to recite offset regions, each comprising inner and outer sides, one of which is formed between the channel region and the source region and the other one of which is formed between the channel region and the drain region, the inner sides of the offset regions directly contacting the channel region, and the outer sides of the offset regions directly contacting the source and drain regions.

Thus, for at least the reasons recited above with regard to claims 6 and 7, Oka fails to teach or render obvious all aspects of amended claim 1. Therefore, this rejection has been respectfully traversed. Reconsideration and withdrawal are respectfully requested. .

CONCLUSION

A full and complete response has been made to the pending Office Action, and all of the stated objections and grounds for rejection have been overcome or rendered moot.

Accordingly, all pending claims are allowable, and the application is in condition for allowance.

The Examiner is invited to contact Applicants' undersigned representative at the number below if it would expedite prosecution. Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,

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